

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE Enited States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS
P. D. Brot 1450
Alexandria, Virginia 22313-1450
vvww.uspto.gev

DATE MAILED: 10/19/2004

| PLICATION NO.                                       | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION N    |  |  |
|---|----------------|----------------------|---------------------|-------------------|--|--|
| 10/007,021  | 11/05/2001     | Richard P. Welty     | 270-3038-U          | 8522              |  |  |
| 26096 7   | 590 10/19/2004 | <b>x</b>             | EXAM                | EXAMINER          |  |  |
| CARLSON, GASKEY & OLDS, P.C.<br>400 WEST MAPLE ROAD |                |                      | PiZſALI, A          | PIZIALI, ANDREW T |  |  |
| SUITE 350   |                |                      | ART UNIT            | PAPER NUMBER      |  |  |
| BIRMINGHAM, MI 48009                                |                |                      | 1771                |                   |  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application No.  | Applicant(s)  |           |
|--|---|--|---|-----------|
|  |   | 10/007,021   | WELTY ET AL.  |           |
|  | Office Action Summary   | Examiner   | Art Unit  |           |
|  |   | Andrew T Piziali   | 1771  |           |
| Period fo  | The MAILING DATE of this communication a<br>or Reply  | ppears on the cover sheet with   | the correspondence address  | S         |
| THE - External control | MORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION ensions of time may be available under the provisions of 37 CFR or SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a report of the provision of the | 1.  1.136(a). In no event, however, may a reply within the statutory minimum of thirty (3 dwill apply and will expire SIX (6) MONTH. | y be timely filed  30) days will be considered timely.  IS from the mailing date of this commun | lication. |
| Status   |   |  |   |           |
| 1)⊠  | Responsive to communication(s) filed on 17  | September 2004.  |   |           |
| 2a)⊠   | This action is <b>FINAL</b> . 2b) Th  | nis action is non-final.   |   |           |
| 3)□  | Since this application is in condition for allow  |  |   | its is    |
|  | closed in accordance with the practice under  | Ex parte Quayle, 1935 C.D. 1   | 1, 453 O.G. 213.  |           |
| Disposit   | ion of Claims   |  |   |           |
| 4)⊠  | Claim(s) 22-53 is/are pending in the applicati  | ion.   |   |           |
|  | 4a) Of the above claim(s) is/are withdr   |  |   |           |
| 5)□  | Claim(s) is/are allowed.  |  |   |           |
|  | Claim(s) 22-53 is/are rejected.   |  | •   |           |
|  | Claim(s) is/are objected to.  |  | •   |           |
| 8)[_]  | Claim(s) are subject to restriction and   | or election requirement.   |   |           |
| Applicati  | ion Papers  |  |   |           |
| 9)[  | The specification is objected to by the Examir  | ner.   |   |           |
| 10)  | The drawing(s) filed on is/are: a) ac   | cepted or b) objected to by  | the Examiner.   |           |
|  | Applicant may not request that any objection to the   | e drawing(s) be held in abeyance   | . See 37 CFR 1.85(a).   |           |
|  | Replacement drawing sheet(s) including the corre  |  |   |           |
| 11)  | The oath or declaration is objected to by the E   | Examiner. Note the attached O  | office Action or form PTO-15  | 2.        |
| Priority u   | under 35 U.S.C. § 119   | i  |   |           |
|  | Acknowledgment is made of a claim for foreig  ☐ All b) ☐ Some * c) ☐ None of:   | n priority under 35 U.S.C. § 11  | 19(a)-(d) or (f).   |           |
|  | 1. Certified copies of the priority documer   | nts have been received.  |   |           |
|  | 2. Certified copies of the priority documer   |  |   |           |
|  | 3. Copies of the certified copies of the pri  |  | ceived in this National Stage   | Э         |
| * 0  | application from the International Bures  |  |   |           |
| 3  | See the attached detailed Office action for a lis   | it of the certified copies not rec   | eived.  |           |
| Attachment   | t(s)  |  |   |           |
|  | e of References Cited (PTO-892)   | 4) Interview Sum   | mary (PTO-413)  |           |
|  | e of Draftsperson's Patent Drawing Review (PTO-948)<br>nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08  | Paper No(s)/M  | lail Date mal Patent Application (PTO-152)  |           |
|  | r No(s)/Mail Date   | 6) Other:  | narr atom repplication (FTO-152)  |           |

Art Unit: 1771

#### **DETAILED ACTION**

### Response to Amendment

1. The amendment filed on 9/17/2004 has been entered. The examiner has withdrawn the 35 USC 112 rejection of claims 28 and 29 based on the amendment to claims 28 and 29.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 22-53 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 5,879,532 to Foster et al. (hereinafter referred to as Foster).

Regarding claims 22-53, Foster discloses an article having on at least a portion of a surface a coating, said article comprising a substrate, a nickel layer, a strike layer consisting essentially of zirconium, titanium or zirconium-titanium alloy directly contacting the nickel layer, and an outer later consisting essentially of zirconium compound, titanium compound, or zirconium-titanium alloy compound directly contacting the strike layer, and the outer layer is uncoated (see entire document including column 1, lines 10-24, column 3, lines 55-63, and column 6, line 42 through column 7, line 11).

Regarding claims 23-27, 33-37, 44, 46, 48 and 52, Foster discloses that the compound may be a carbide, oxide, nitride, or a carbonitride (column 6, line 65 through column 7, line 11).

Art Unit: 1771

Regarding claims 28-29, 32-41 and 48-53, Foster discloses that the article may be aluminum or zinc (column 3, lines 55-63).

Regarding claims 30, 32-41 and 48-53, Foster discloses that the strike layer may have a thickness between 0.25 millionths of an inch and 50 millionths of an inch (column 8, lines 22-33).

Regarding claim 31 and 40, Foster discloses that the outer layer may have a thickness between about 2 millionths of an inch and about 30 millionths of an inch (column 8, lines 53-65).

Regarding claims 38 and 42, Foster discloses that the article may be a faucet (column 1, lines 10-24).

Regarding claims 39 and 43, Foster discloses that the article may be a doorknob (claim 56).

4. Claims 39 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,879,532 to Foster as applied to claims 22-53 above, and further in view of USPN 5,759,677 to Fink.

Fink discloses that faucet coatings may be used for doorknobs (column 1, lines 7-17). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the substrate a doorknob, as disclosed by Fink, because a doorknob is a piece of door hardware that requires corrosion resistance and a desired color.

## Response to Arguments

5. Applicant's arguments filed 9/17/2004 have been fully considered but they are not persuasive.

The applicant asserts that Foster does not teach or suggest an article having a nickel layer,

Art Unit: 1771

a strike layer consisting essentially of zirconium, titanium, or zirconium-titanium alloy that directly contacts the nickel layer, and an uncoated outer layer consisting essentially of zirconium compound, titanium compound, and zirconium-titanium alloy compound that directly contacts the strike layer. The applicant asserts that Foster does not read on the current claims because Foster necessarily includes at least one of a sandwich layer (26), a reaction products layer (34), or a metal oxide layer (36). The examiner respectfully disagrees.

The inclusion of the sandwich layer (26) is simply one embodiment of the invention disclosed by Foster (see column 9, lines 6-20 and dependent claim 12). The inclusion of the reaction products layer (34) is simply one embodiment of the invention disclosed by Foster (see column 10, lines 45-57 and dependent claim 15). The inclusion of the metal oxide layer (36) is also simply one embodiment of the invention disclosed by Foster (see column 11, lines 15-27 and dependent claim 14). Layers (26), (34), and (36) are clearly optional additional layers that may be added to the inventive article of Foster. The invention disclosed by Foster, without the additional optional layers, reads on the current claims.

The applicant is directed to claim 1 of Foster. Foster does not mention a sandwich layer (26), a reaction products layer (34), or a metal oxide layer (36). Claim 1 of Foster discloses an article having an electroplated layer (13) (claim 2 specifically teaches nickel), at least one layer (22) selected from the group consisting of refractory metal and refractory metal alloy on at least a portion of the electroplated layer (claim 3 specifically teaches zirconium, titanium, or a zirconium-titanium alloy), and at least one layer (32) selected from the group consisting of refractory metal compound and refractory metal alloy compound (claim 6 specifically teaches zirconium compound, titanium compound, or zirconium-titanium alloy compound).

Art Unit: 1771

#### Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

978 10/14/04

ANDREWT. PIZIALI
PATENT EXAMINER

Ms. Arti R. Singh

Primary Examiner Tech Center 1700